



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,685	10/30/2003	Michael Harville	200313422-1	3564
22879 7590 06/02/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
			EXAMINER	
			ALAM, UZMA	
		ART UNIT		PAPER NUMBER
		2157		
		NOTIFICATION DATE		DELIVERY MODE
		06/02/2008		ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM

mkraft@hp.com

ipa.mail@hp.com

Office Action Summary

Application No.

10/698,685

Applicant(s)

HARVILLE ET AL.

Examiner

UZMA ALAM

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 36-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 36-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 12/10/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to the arguments filed December 10, 2007. Claims 1 and 36-74 are pending. Claims 1 and 36-74 represent a method for managing a streaming media service.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 36-74 are rejected under 35 U.S.C. 102(e) as being anticipated by Lumelsky et al. US Patent No. 6,529,950. Lumelsky teacheses the invention as claimed including a resource management framework to negotiate mapping of media service providers over a network (see abstract).

As per claim 1, Lumelsky teaches a method for managing a streaming media service, said method comprising:

receiving a request for a streaming media service from a client, (Column 3, Lines 39-50; Column 4, Lines 24-40; Column 9, lines 54-67; column 10, lines 1-5);

selecting a service location manager to which to provide said request from a plurality of service location managers [negotiation 40/cluster], said service location manager configured for

selecting a service provider from a plurality of service providers; (brokers, negotiators; column 1, lines 52-64; column 2, lines 6-21; column 3, lines 50-60, column 4, lines 32-45, column 5, lines 60-67; column 6, lines 1-16);

selecting said service provider to which to assign said media service component from a plurality of service providers of a network (matches; column 2, lines 33-49; column 3, lines 50-60; column 4, lines 4-21; column 4, lines 45-67; column 5, lines 60-67; column 6, lines 1-16; column 10, lines 7-28);

informing said service provider of said assignment to perform said media service component, causing said service provider to prepare to perform said streaming media service on streaming media (column 3, lines 61-67; column 4, lines 1-8; column 8, lines 26-30; column 10, lines 58-67);

using information to determine whether to initiate a handoff of said streaming media service from said service provider to another service provider (contract; column 5, lines 4-40; column 7, lines 56-67; column 8, lines 1-10; column 8, lines 30-46); and

if it is determined to initiate said handoff, initiating said handoff (column 8, lines 50-67).

As per claim 36, Lumelsky teaches the method as recited in claim 1, wherein said information comprises information received from said service providers and information associated with location and priority of said service providers (column 4, lines 45-67).

As per claim 37, Lumelsky teaches the method as recited in claim 1, wherein said information comprises information received from any client device that is involved in said

streaming media service (Fig. 3, 110; Column 5, Lines 23-27).

As per claim 38, Lumelsky teaches the method as recited in claim 1, wherein said information comprises information associated with network conditions (QoS; column 10, lines 41-57).

As per claim 39, Lumelsky teaches the method as described in claim 1, wherein said selecting said service location manager comprises: maintaining a record comprising identifying information for a set of service location managers among said plurality of service location managers; (hierarchal directors; column 4, lines 4-55) and

selecting said service location manager in a round robin manner from said record (column 4, lines 55-67).

As per claim 40, Lumelsky teaches the method as described in claim 1, wherein said selecting said service location manager comprises a comparison of available resources of a first set of service providers supervised by a first service location manager and available resources of a second set of service providers supervised by a second service location manager (column 3 lines 52-61).

As per claim 41, Lumelsky teaches the method as described in claim 1, wherein said selecting said service location manager comprises a comparison of processing loads of at least two service location managers among said plurality of service location managers (resource

priority; column 6, lines 19-25).

As per claim 42, Lumelsky teaches the method as described in claim 1, wherein said selecting said service location manager is based on an estimate of a network communication condition between two entities connected by the network (availability and load balancing; column 6, lines 25-38).

As per claim 43, Lumelsky teaches the method as described in claim 1, further comprising: notifying a second service location manager among said plurality of service location managers of the assignment of said service provider to perform said media service component (extended negotiation; column 6, lines 36-67).

As per claim 44, Lumelsky teaches the method as described in claim 1, wherein said service provider is supervised by more than one service location manager among said plurality of service location managers (column 6, lines 36-67).

As per claim 45, Lumelsky teaches the method as described in claim 44, further comprising: maintaining a record comprising identifying information of a set of service location managers among said plurality of service location managers, each service location manager of said set of service location managers supervising said service provider (cluster; column 7, lines 56-67); and

notifying said set of service location managers according to said record of said assignment of said service provider to perform said media service component (column 8, lines 1-10).

As per claim 46, Lumelsky teaches the method as described in claim 1, further comprising: receiving resource availability information from said plurality of service providers, wherein said information is ascertained from ongoing resource measurements (dynamic constraints such as QoS; column 2, lines 46-65; column 8, lines 65-67); and

said selecting said service provider based on said resource availability information (column 2, lines 65-67; column 9, lines 1-10).

As per claim 47, Lumelsky teaches the method as described in claim 46, wherein said resource availability information is pushed from said plurality of service providers (mapping; column 10, lines 7-40).

As per claim 48, Lumelsky teaches the method as described in claim 46, wherein said receiving resource availability information occurs in response to polling of said service providers (mapping; column 10, lines 7-40).

As per claim 49 Lumelsky teaches the method as described in claim 1, wherein said selecting said service provider is based on static service provider information or static network

information (: column 4, lines 23-31).

As per claim 50, Lumelsky teaches the method as described in claim 49, wherein said static service provider information or static network information consists of at least one of the following: information concerning computational and memory resources, connectivity and expected bandwidth and latency between servers, client and content addresses, session dispatch history, and network proximity (column 6, lines 18-35).

As per claim 51, Lumelsky teaches the method of claim 1, wherein said selecting said service provider comprises: maintaining a record comprising assignments of service providers to perform media service components (heirarchial directory; column 4, lines 4-20); and
said selecting said service provider based on said record (select resource; column 4, lines 16-21).

As per claim 52, Lumelsky teaches the method of claim 1, wherein said selecting said service provider comprises:
maintaining a record comprising assignments of service providers to perform media service components (column 4, lines 4-20);
receiving resource availability information from said plurality of service providers, wherein said information is ascertained from ongoing resource measurements (ongoing; column 8, lines 65-67); and

said selecting said service provider based on said resource availability information and said record (column 9, lines 1-15).

As per claim 53, Lumelsky teaches the method as described in claim 1, wherein said selecting said service provider is based on an estimate of resources associated with performing said service (preview; column 3, lines 53-62).

1. Claims 54-60 disclose a computer readable medium comprising computer-executable instructions stored thereon for implementing a method and are rejected under the same rationale as claims 1, 36-74 which teaches the method.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to UZMA ALAM whose telephone number is (571)272-3995. The examiner can normally be reached on Mondays and Tuesdays 5:30 - 2.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2157

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Uzma Alam

Ua

May 26, 2008

/Ario Etienne/

Supervisory Patent Examiner, Art Unit 2157